UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,235	12/17/2001	Kerry Bernstein	BUR9-2001-0178-US1	3714

			EXAMINER
28211	7590	12/14/2005	SAXENA, AKASH

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2128	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/023,235	BERNSTEIN ET AL.
	Examiner	Art Unit	
	Akash Saxena	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 December 2001*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 March 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date *12/17/01*.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1. Claims 1-40 have been presented for examination based on the application filed on 17th December 2001.

Claim Interpretation

2. Claim 1: "the *first bounded range of the performance parameter* is understood as *process parameters* associated to a *process model* for individual manufacturing process executed on a CAD system. Similarly, the second bounded range of the performance parameter is understood as *device parameters* associated to a *device model* executed on a CAD system.

Claim Objections

3. Claim 18 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. There is a break in sequence and claim 18 inherits from claim 15 which is in a separate branch than claim 17.

4. Claim 19 recites the limitation "proposing a particular feature for said design". There is insufficient antecedent basis for this limitation "said design" in the claim. Changing the language to "a design" is suggested.

5. Claim 33 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent

form, or rewrite the claim(s) in independent form. Claim 33 does not further limit the

claimed limitation of "correlating" primary and secondary parameters, presented in

parent claim 30.

Claim Rejections - 35 USC § 112¶1

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply

with the enablement requirement. The claim(s) contains subject matter which was

not described in the specification in such a way as to enable one skilled in the art to

which it pertains, or with which it is most nearly connected, to make and/or use the

invention.

Regarding Claim 1

Claim 1 as recited does not produce any useful, tangible and concrete result as

detailed in 35 USC 101 rejection below. As recited the claim does not enable any

one to make/design a computer model of a device just by describing the

performance parameters of the device. Further, as the claim is not limited to a

technological art, specification does not enable all the limitations claimed in the

claims (details of the first and second bound ranges).

Claims 2-8 are rejected based on the their dependence on the claim 1.

Claim Rejections - 35 USC § 112¶2

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

7. Claims 14-18, 19-22, 36-40 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention.

<u>Regarding Claim 14</u>

Claim 14 discloses a method of "developing a product having a device" including a

step of "producing a target model". If "developing" is understood as conceptual

representation of the actual device (not a real manufactured device), claim does not

provide any difference between the product, device and target model. Further, no

distinction is provided between product and device, clarifying how their designing is

different from each other. Else if "developing" is understood as producing a actual

product (and/or device – distinction unclear) than the target model is clearly a

conceptual representation and product is a real semiconductor chip (for example).

Since various interpretation of terms "developing, product, device, target model" are

possible, this claim is vague and indefinite, limiting one of ordinary skill in the art for

making/practicing the invention.

Claims 15-18 are rejected based on their dependency on claim 14.

Regarding Claim 19

Claim 19 discloses a method of "designing a device" and the steps leading to the designing do not design a device. A target model of desired feature is produced as the last step. Claim is hence deemed vague and indefinite.

Claims 20-22 are rejected based on their dependency on claim 19.

8. Claim 36 & 40 recites the limitation "computer medium". There is insufficient antecedent basis for this limitation in the claim in view of provided disclosure. Dependent claims 37-39 are rejected based on their dependency on claim 36.

Claim Rejections – 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claim 1-8, 36-40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

<u>Regarding Claims 1-8</u>

Claim 1 a "computer model of a device", does not fall in any of the four statutory categories. MPEP 2106 states

> Office personnel should begin claim analysis by identifying and evaluating each claim limitation. For processes, the <u>claim limitations will define steps or acts to be performed</u>. For products, the claim limitations will define discrete physical structures or materials. Product claims are claims that are <u>directed to either machines, manufactures or compositions of matter</u>. The discrete physical structures or materials may be comprised of hardware or a combination of hardware and software.

Claim 1 does not recite any method/process steps hence this does not fall in Process category. No discrete physical structure or materials are recited hence that precludes other machines, manufactures or compositions of matter categories. Further, claim 1 as recited is not tangibly embodied and does not present a concrete result. An invention which is eligible for patenting under 35 U.S.C. § 101 is in the "useful arts" when it is a machine, manufacture, process or composition of matter, which produces a concrete, **tangible**, and useful result. The fundamental test for patent eligibility is thus to determine whether the claimed invention produces a **"useful, concrete and tangible result."** The test for practical application as applied by the examiner involves the determination of the following factors:

(1) "Useful" – The Supreme Court in Diamond v. Diehr requires that the examiner look at the claimed invention as a whole and compare any asserted utility with the claimed invention to determine whether the asserted utility is accomplished.
(2) "Tangible" – Applying In re Warmerdam, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994), the examiner will determine whether there is simply a mathematical construct claimed, such as a disembodied data structure and method of making it. If so, the claim involves no more than a manipulation of an abstract idea and therefore, is nonstatutory under 35 U.S.C. § 101. In Warmerdam the abstract idea of a data structure became capable of producing a useful result when it was fixed in a tangible medium which enabled its functionality to be realized.
(3) "Concrete" – Another consideration is whether the invention produces a "concrete" result. Usually, this question arises when a result cannot be assured. An appropriate rejection under 35 U.S.C. § 101 should be accompanied by a lack of enablement rejection, because the invention cannot operate as intended without undue experimentation.

Further, claim 1 represents an abstract idea, which as recited is not applied to any specific technological art. Claim 1 is merely drawn to a <u>mental process</u> for a model of device, since the language of the claims can be interpreted as meaning the method is <u>carried out by a mental process augmented (calculated) using pencil and paper</u>. (i.e. **not a machine or computer process**).

Claims 2-8 are rejected based on their dependency on claim 1.

<u>Regarding Claim 36-39</u>

The Examiner submits that product claims 36-39, as written, are merely drawn to nonstatutory descriptive material since the claimed "computer readable medium storing a computer model do not appear to impart any functionality. (i.e. <u>not a computer program product or executable instructions embodied on a computer-readable medium</u>). MPEP 2106 recites the following supporting rational for this reasoning:

"Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." <u>In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when **employed as a computer component**</u>. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data. **Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se.** Warmerdam, 33 F.3d at 1360,

31 USPQ2d at 1759. When functional descriptive material is **recorded on some computer-readable medium** it becomes structurally and **functionally interrelated to the medium** and will be <u>statutory in most cases since use of technology permits the function of the descriptive material to be realized</u>."

Secondly, the term "computer medium" is not defined in the specification (See 35 USC 112 2nd rejection). Claims 37-39 are rejected based on their dependency on claim 36.

<u>Regarding Claim 40</u>

The Examiner submits that product claim 40, as written, is merely drawn to nonstatutory descriptive material since the claimed "computer readable medium storing a design generated utilizing a computer model" where the computer medium storing the design" do not appear to impart any functionality and is functionally non-descriptive material. This claim is rejected with the similar rationale cited from MPEP as claim 36.

Claim Rejections – 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

  1.   Determining the scope and contents of the prior art.
  2.   Ascertaining the differences between the prior art and the claims at issue.
  3.   Resolving the level of ordinary skill in the pertinent art.
  4.   Considering objective evidence present in the application indicating
       obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the

various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the

obligation under 37 CFR 1.56 to point out the inventor and invention dates of each

claim that was not commonly owned at the time a later invention was made in order

for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35

U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-27 & 30-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6269277 issued to Hershenson et al (HE'277hereafter), in view of U.S. Patent No. 5,966,527 Krivokapic et al (KR'527 hereafter).

Regarding Claim 1

HE'277 teaches a computer model of a device (HE'277: Col.4 Lines 61-67); a performance parameter (HE'277: Col.3 Line 67 – Col.4 Line 5); performance parameter includes a first bounded range and a second bounded range as inequality constraints (HE'277: Col.4 Lines 5-26); the second bounded range comprises performance parameter variations of different device designs as various device topologies (Col.3 Lines 62-67, Col.5 Lines 40-46, 50-67, Col.6 Lines 1-2).

HE'277 does not teach explicitly first bounded range comprising performance parameter variations within a single manufacturing process, although HE'277 discloses generation of appropriate device model based on the technology, process performance parameters.

KR'527 teaches a semiconductor process simulator (KR'527: Fig.6a Element 620) and process parameters for individual processes (KR'527: Fig.6a Elements 602a-e) are sampled in and or simulated from the Monte Carlo Engine (KR'527: Fig.6b Elements 690, 693-695, 620). Range bounds are also provided (Abstract: Col.19-27; Col.8 Lines 50-63).

It would have been obvious to one (e.g. a designer) of ordinary skill in the art at the time the invention was made to apply the teachings of KR'527 to HE'277. The motivation to combine would have been that HE'277 and KR'527 are analogous art

modeling the device and process of semiconductor manufacturing processes (KR'527: Abstract; HE'277: Abstract), where the simulation is controlled by the multiple attributes/parameters/constraints (HE'277: Summary) inputted into the device & process simulator (KR'527: Fig4, 5a-b).

Regarding Claim 2

HE'277 teaches that different device designs are directed to variations of a single device design (Col.5 Lines 63-67).

Regarding Claim 3

KR'527 teaches that performance parameter is the same for a target model of said device and a final hardware design of said device (KR'527: Fig.6a, Fig.3) as the (performance) parameters are used for manufacturing and modeling. KR'527 teaches in interaction between the actual manufacturing and model simulation (KR'527: Col.9-11).

Regarding Claim 4-7

HE'277 teaches using multiple constraints where the constraints vary as defined in the simulation, further HE'277 teaches performing tradeoff optimization between various constraints graphically displayed as curves (HE'277: Col.6 Lines 3-24). KR'527 also teaches statistical Monte Carlo based inputs (as ranges) & range correction (KR'527: Fig.6b, Col.12 Lines 8-50). Plurality of performance points are selected as various input parameter values from statistical distributions mentioned above.

Regarding Claim 8

HE'277 teaches using geometric programming with its advantageous ability to solve

thousands of constraints (HE'277: Col.5 Lines 6-35). Further, HE'277 teaches these

constraints can be displayed as tradeoff (implying at least two constraints with

plurality of evaluated results) in form of curve representing performance parameters

with two-dimensional range of plurality of performance points (HE'277: Col.6 Lines

3-24; Also see KR'527: Col.12 Line 63-Col.13 Line 23).

Regarding Claim 9

Method claim 9 discloses similar limitations as claim 1 and is rejected for the same

reasons as claim 1.

Regarding Claim 10

Method claim 10 discloses similar limitations as claim 2 and is rejected for the same

reasons as claim 2.

Regarding Claim 11

Method claim 11 discloses similar limitations as claim 3 and is rejected for the same

reasons as claim 3.

Regarding Claim 12

Method claim 12 discloses similar limitations as claim 4 and is rejected for the same

reasons as claim 4.

Regarding Claim 13

Method claim 13 discloses similar limitations as claim 6 and is rejected for the same

reasons as claim 6.

Regarding Claim 14 & 15

Method claims 14 & 15 disclose similar limitations as claim 1 and are rejected for the

same reasons as claim 1. Limitation disclosed as "design goals" is further disclosed

as "performance parameter". HE'277 teaches producing a target model (HE'277:

Col.4 Lines 61-67). Further, KR'527 teaches developing a device and product based

on the target model (KR'527: Fig.6a, Col.9-11 Section III).

Regarding Claim 16

Method claim 16 discloses similar limitations as claim 2 and is rejected for the same

reasons as claim 2.

Regarding Claim 17

Method claim 17 discloses similar limitations as claim 3 and is rejected for the same

reasons as claim 3.

Regarding Claim 18

Method claim 18 discloses similar limitations as claim 6 and is rejected for the same

reasons as claim 6.

Regarding Claim 19

Method claim 19 discloses similar limitations as claim 1 and is rejected for the same

reasons as claim 1. Proposed feature is understood as performance parameter

having first bound (primary parameter) & second bound (secondary parameter).

KR'527 teaches determining secondary parameters from said primary parameters

(KR'527: Fig.6a-b-c; Col.13 Lines 10-23 – I/V curve from L,T,N parameters) where

the primary parameters are inputted into process simulator and secondary

parameters are derived from primary parameters (element 680-615-618) and

inputted into device simulator (Element 640).

Regarding Claim 20

KR'527 teaches correlating secondary parameters to at least one further secondary

parameter (Col.12 Lines 8-62; Fig.6a-c & 7 a-c).

Regarding Claim 21

KR'527 teaches verifying that all primary and secondary parameters are within

allowable limits (Col.13 Lines 24-62).

Regarding Claim 22

HE'277 teaches specifying parameters as first order and second order (HE'277:

Col.11 Line 59-Col.12 Line 15).

Regarding Claim 23

Method claim 23 discloses similar limitations as claim 1 and is rejected for the same

reasons as claim 1. HE'277 teaches determining a set of design distributions that

are within a given set of performance targets for a plurality of parameters; altering

different features of design; and determining whether altered design is within said

set of design distributions (HE'277: Col.5 Line 63-Col.6 Line 24).

Regarding Claim 24

Method claim 24 discloses similar limitations as claim 14 and is rejected for the

same reasons as claim 14. In addition claim 24 discloses the "target performance

parameter ranges" which HE'277 teaches (HE'277: Col.3 Line 67 – Col.4 Line 40;

esp. lines 15-20).

<u>Regarding Claim 25</u>

Method claim 25 discloses similar limitations as claim 6 and is rejected for the same reasons as claim 6.

<u>Regarding Claim 26</u>

Method claim 26 discloses similar limitations as claim 4 and is rejected for the same reasons as claim 4.

<u>Regarding Claim 27</u>

KR'527 teaches the step of accepting altered device design further comprises the steps of carrying out experiments on test chips (KR'527: Fig.3, actual to simulated data comparison & guard band generation Col.13 Lines 32-62).

<u>Regarding Claim 30 & 33</u>

KR'527 teaches calculating a primary parameter from a physical device feature as L, T and N values (KR'527: Col.11 at least in Lines 19-27); correlating a secondary parameter from said primary parameter as associating resulting I/V curve with the L, T, N values (KR'527: Col.13 Lines Col.13 Lines 10-23); and comparing said secondary parameter to said target performance parameter (KR'527: Col.13 Lines 24-37).

<u>Regarding Claim 31</u>

KR'527 teaches correlating other secondary parameters from correlations to said secondary parameters as correlating the V/I curve to the various channel length and attributes (short, short long etc) (KR'527: Fig 5a, Element 500).

Regarding Claim 32

KR'527 teaches primary parameter is directly related to physical device feature as related to channel length, doping, gate oxide thickness (KR'527: Col.11 at least in Lines 19-27 & Table C).

Regarding Claim 33

KR'527 teaches correlating primary to secondary parameters (KR'527: Fig 5a, Element 500). Secondary parameters could be derived parameters like "beta" whose derivation using equation is well known in the art.

Regarding Claim 34

Method claim 34 discloses similar limitations as claim 3 and is rejected for the same reasons as claim 3.

Regarding Claim 35

Method claim 35 discloses similar limitations as claim 6 and is rejected for the same reasons as claim 6.

Regarding Claim 36

Product claim 36 discloses similar limitations as claim 6 and is rejected for the same reasons as claim 6.

Regarding Claim 37

Product claim 37 discloses similar limitations as claim 4 and is rejected for the same reasons as claim 4.

<u>Regarding Claim 38</u>

Method claim 38 discloses similar limitations as claim 7 and is rejected for the same reasons as claim 7.

<u>Regarding Claim 39</u>

Method claim 39 discloses similar limitations as claim 8 and is rejected for the same reasons as claim 8.

<u>Regarding Claim 40</u>

Method claim 40 discloses similar limitations as claim 1 and is rejected for the same reasons as claim 1.

11. Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over

U.S. Patent No. 6269277 issued to Hershenson et al (HE'277 hereafter), in view

of U.S. Patent No. 5,966,527 Krivokapic et al (KR'527 hereafter), further in view

of U.S. Patent No. 6,028,994 issued to Peng et al (PE'994 hereafter).

Regarding Claim 28 & 29

Teaching of HE'277 & KR'527 are shown in claim 24 rejections above.

HE'277 & KR'527 do not teach design goals for product, developing product fro

from target model and product model simulation & alteration based on feedback.

PE'994 teaches teach design goals for product (PE'994: Col.2 Line 49-59 –

predicted performance), developing product from target model as combined product

& device model represented by product performance model (PPM) (PE'994: Fig. 1;

Col.6 Lines 57-67) and product model simulation & alteration based on feedback as

self learning (PE'994: Fig.1 Step 64). The product is represented as package of

wafer chip and the device is represented as wafer chip (PE'994: See Fig.1).

It would have been obvious to one (e.g. a designer) of ordinary skill in the art at

the time the invention was made to apply the teachings of PE'994 to HE'277 &

KR'527. The motivation to combine would have been that HE'277 & KR'527 and

PE'994 are attempting to design a model that can mimic and or predict the

performance of the semiconductor model (PE'994: Abstract; HE'277 & KR'527:

Abstracts) based on the input parameters. Further, teaches PE'994 specifying the

input parameters as ranges (PE'994: Fig.3 Col.5 Lines 35-48) for performance which

is very similar to the KR'527 teachings disclosed before relating to ranges for

performance parameters.

Conclusion

12. All claims are rejected.

13. The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

14. **Examiner's Note:** Examiner has cited particular columns and line numbers in the

references applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are

applied to specific limitations within the individual claim, other passages and figures

may apply as well. It is respectfully requested from the applicant in preparing

responses, to fully consider the references in their entirety as potentially teaching all

or part of the claimed invention, as well as the context of the passage as taught by

the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to

indicate the portion(s) of the specification which dictate(s) the structure relied on for

proper interpretation and also to verify and ascertain the metes and bounds of the
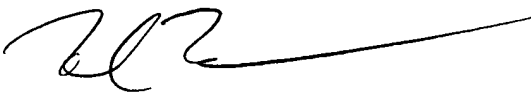
claimed invention.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akash Saxena whose telephone number is (571) 272-8351. The examiner can normally be reached on 9:30 - 6:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini S. Shah can be reached on (571) 272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Thursday, December 01, 2005

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